

REMARKS

Claims 1-18 currently appear in this application. The Office Action of November 10, 2003, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicants respectfully request favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Restriction

Restriction has been required between product and process claims, and presently claims 6-12 are under consideration. New claims 15-18 have been submitted which new claims also depend from claim 6.

Sequence Disclosures

The amino acid sequence on page 20, paragraph 0050, has now been identified as SEQ ID NO:7. A supplemental sequence listing is submitted herewith.

Claims 6-10 are objected to because the claims are dependent on non-elected claims.

Accordingly, claim 6 has been amended to include the limitations of claim 1 from which original claim 6 depended.

Rejections under 35 U.S.C. 101

Claims 6-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed toward non-statutory subject matter.

In accordance with the Examiner's helpful suggestion, the claims have been amended to claim an isolated DNA.

Rejections under 35 U.S.C. 112

Claims 6-12 are rejected under 35 U.S.C. 112, first paragraph, as the disclosure is said to be enabling only for claims limited to nucleic acid sequences encoding the polypeptide of SEQ ID NO:3 including SEQ ID NO's: 4 and 5.

This rejection is respectfully traversed. The passage "in whole or in part" has been deleted from the claims.

Claims 6-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "in whole or in part as an amino acid sequence" has been said to be indefinite.

This rejection is respectfully traversed. The claims have been amended to delete "in whole or in part." In

addition, the phrase "homolog" has been amended to "variants of the nucleotide sequence of SEQ ID NO:4 (or SEQ ID NO:5) where one or more bases are replaced with other bases with respect to the degeneracy of the genetic code without altering the amino acid sequence which they encode." Support for this amendment can be found in the specification at page 6, lines 17-25.

Art Rejections

Claims 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Steinmetz et al.

This rejection is respectfully traversed. The claims have now been amended to recite that the DNA is isolated DNA, which is not disclosed or suggested by Steinmetz. Additionally, the passage "in part" has been deleted from the claims, and "homolog" has been replaced by a definition of base substitution.

Allowable Subject Matter

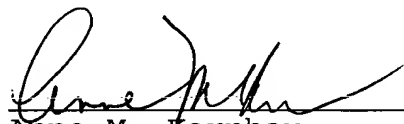
It has been noted that claims directed to nuclei acid encoding the polypeptide of SEQ ID NO:3 including SEQ ID NO's 4 and 5 would be considered favorably.

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In view of the above, it is respectfully
submitted that the claims are now in condition for allowance,
and favorable action thereon is earnestly solicited.

Respectfully submitted,

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